Developing a Chemical Detection Response System for Anaheim Convention Center

Convention centers, stadiums and arenas are attractive targets for those who seek to inflict significant harm to the public and to our nation.

The Anaheim Convention Center contains more than 1 million square feet of exhibition space and can accommodate about 90,000 patrons.

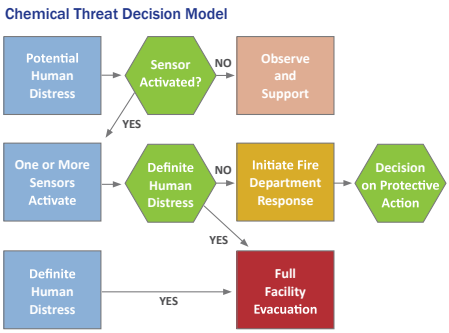
The Challenge

To address this potential threat, the U.S. Department of Homeland Security requested assistance from Argonne National Laboratory to develop an integrated response for a chemical detection system at the Anaheim Convention Center (ACC) to serve as an example to other such facilities.

Argonne's Center for Integrated Emergency Preparedness and its Infrastructure Assurance Center are uniquely qualified to handle issues regarding national security risks and emergency management. Argonne was chosen so the plan would employ the best practices and lessons learned from its experience with PROTECT (a chemical detection system for the nation's transit systems), the U.S. Army's Chemical Stockpile Emergency Preparedness Program and the Federal Emergency Management Agency's Urban Areas Security Initiative.

The Solution

Argonne researchers worked collaboratively with ACC staff and the Anaheim first responder community to integrate both a state-of-the-art terrorist chemical detection system and a command-and-control system into an Emergency Operations Plan. A set of all-hazard Standing Operating Procedures was prepared to identify the appropriate roles and responsibilities related to emergencies and disasters that involve the release of a chemical agent and other security threats.



This chemical threat decision model continually protects visitors to the Anaheim Convention Center.

The Results

The ACC's Emergency Operations Plan serves as a design and implementation template for use in other public entertainment venues.

"Our work with the Anaheim Convention Center will serve as a great example for other large venues looking to develop plans that will ensure public safety at their facilities," **said Patrick Wilkey, systems engineer, Argonne National Laboratory.**